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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,338	03/24/2004	Han Sol Cho	3811-0140P	3498

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EXAMINER

KIM, ELLEN E

ART UNIT PAPER NUMBER

2874

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/807,338	Applicant(s) CHO ET AL.	
	Examiner Ellen Kim	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claims 3, 5, and 6 are objected to because of the following informalities.

In claim 3, the parenthesis is not properly closed in the claim.

In claims 5 and 6, Applicant claims solvent or liquid phase, Examiner notes that Applicant already defines the annealing medium is a gas in claim 1. Therefore, it is clear how the gas can be a liquid or a solvent.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 6, and 8-11 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Cooke et al [USPAT 4,541,979].

Cooke et al disclose a process and apparatus for manufacturing optical cable elements and show a method for treating a polymeric optical element [optical fiber cable] which comprises:

Mounting a polymeric optical element into a chamber 20 or 10;

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Introducing a compressed gas as an annealing medium into the chamber and annealing the polymeric optical element [column 2, lines 42-end]; and

Removing the annealing medium from the chamber [inherently done].

In re claim 6, Cooke et al teach at column 2, lines 42-end that the temperature can be raised to 350-400 °C, therefore, it is clear that the vapor phase approaches the supercritical phase.

Claims 1-3, and 5-12 are further rejected under 35 U.S.C. 102(b) as being clearly anticipated by Soane et al [USPAT 5,026,147].

Soane et al disclose a method for treating a polymeric optical element, which comprises:

Mounting a polymeric optical element into a chamber 20;

Introducing a compressed gas [from gas tank 12 in front drawing] as an annealing medium into the chamber 20 and annealing the polymeric optical element [column 7, lines 28-45]; and

Removing the annealing medium from the chamber [inherently done, see column 7, lines 54-57].

In re claims 2 and 3, Soane et al teach at column 3, lines 35-52 that the polycarbonate can be utilized.

In re claim 6, Soane et al teach at column 10, claim 2 that the temperature can be raised to 100 °C, therefore, it is clear that the vapor phase approaches the supercritical phase.

In re claim 7, Soane et al teach at column 10, claim 4 that CO₂ gas is utilized.

In re claim 12, Soane et al show at column 10, claim 5 that the pressure is about 400 psi which is about 27 atm.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3, 7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et al.

Cooke et al disclose every aspect of claimed invention except for the claimed material.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify to include the claimed material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soane et al.

Soane et al disclose every aspect of claimed invention except for the polymeric optical elements is plastic optical fiber.

Soane et al, however, clearly teach that the device is used for non-linear optical polymeric article. Therefore, It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Soane et al device to make a non-linear optical fiber if need be.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

For all official patent application related correspondence for organizations reporting to the Commissioner of Patents:

- Correspondence that is transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen Kim whose telephone number is (571) 272-2349. The examiner can normally be reached on Monday through Thursday.

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Ellen E. Kim

Primary Examiner

September 27, 2005/EK

A handwritten signature in black ink, appearing to be 'EEK', is written over the text 'September 27, 2005/EK'.